One Water One Watershed

…A United Voice for the Santa Ana Watershed

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SE Corporation

Garry Brown
Orange County CoastKeepers

Steve PonTell
Regional Water Quality Control Board

NOTICE AND AGENDA
STEERING COMMITTEE MEETING

Thursday, March 17, 2011 – 3:00 p.m.

SAWPA, 11615 Sterling Avenue, Riverside, CA, 92503

1.	Welcome and Introductions	Ron Sullivan
2.	OWOW Steering Committee Terms **Recommendation**: Discussion regarding open seats.	Celeste Cantú
3.	Proposition 1 E – Stormwater Projects **Recommendation**: Consider updating the OWOW Project List to include six additional Proposition 1E eligible projects.	Jeff Beehler
4.	Approval of Minutes from the Meeting of 1-20-11 **Recommendation**: Approve as mailed.	Ron Sullivan
5.	Announcements NEXT MEETING: **May 19, 2011 - 3 p.m.** OWOW Conference - Riverside Convention Center – April 27, 2011	Celeste Cantú
6.	Adjournment	Ron Sullivan

OWOW STEERING COMMITTEE MEMORANDUM NO. 0006

DATE: March 17, 2011

TO: OWOW Steering Committee

SUBJECT: OWOW Project Portfolio: Project List Update

PREPARED BY: Jeffrey Beehler, Program Manager

RECOMMENDATION

It is recommended that the Steering Committee consider updating the OWOW Project List to include six additional projects that maximize regional project benefits.

DISCUSSION

In April 2011, the California Department of Water Resources (DWR) will solicit proposals to fund $212 M in projects under Proposition 1E. These projects are intended to reduce flood damage. However, projects providing additional benefits such as: 1) groundwater recharge; 2) water quality improvements; 3) ecosystem restoration; and 4) reduce erosion and sedimentation, are favored in this competitive process. Individual agencies seeking funding in this competitive process are required to be part of a regional integrated planning process where the multiple and regional benefits of a project are considered. Most project proponents applying to DWR for funding already have included their projects in the most recent OWOW Plan.

Based on Steering Committee direction, staff reopened the OWOW project proposal application process so that projects not included in the OWOW Plan could be vetted and considered for inclusion on the OWOW list. SAWPA staff held a workshop on February 3 to describe the process to interested stakeholders. The workshop notice and additional electronic update information were provided to over 2,700 stakeholders from the Santa Ana River Watershed. Project proponents already included in the OWOW Plan did not need to update their project information. All proponents need to show that they adopted the OWOW planning document.

Six additional projects were included into the OWOW project database. They are summarized in the table (Attachment No. 1) and specific descriptions for each application is included (Attachment No. 2). All projects will provide additional flood control benefits to the region. In sum, projects also will provide groundwater recharge, transport low flows/stormwater to treatment wetlands, and reduce sedimentation, especially at Prado Dam. All projects can be viewed as providing multiple benefits.

JB:dm

Attachments:
1. Table of Additional Projects Submitted
2. Project Descriptions for Proposed Additions

Attachment 1: Additional Projects Submitted for Addition to OWOW Project List

Project #	Project Agency	Project Title	Total Cost	Funding Requested
1315	City of Tustin	Irvine Boulevard Storm Drain Project	$4,200,000.00	$2,100,000.00
1316	City of Ontario	New Model Colony Storm Drain – Unit A	$19,000,000.00	$9,500,000.00
1317	City of Chino	Pine Avenue/ Meadow House Creek Storm Drain Crossing	$3,500,000.00	$1,750,000.00
1318	City of Anaheim	Ball Road Sanitary Sewer and Storm Drain Improvements from Beach Boulevard to Knott Street	$26,300,000.00	$13,150,000.00
1319	City of Anaheim	Ball Road Channel from Carbon Creek Channel to Knott Street	$5,400,000.00	$2,700,000.00
1320	City of Ontario	Frances Street Storm Drain – Unit B	$10,000,000.00	$5,000,000

1315

Irvine Boulevard Storm Drain Project

City of Tustin

	AGENCY INFO	
Project No	1315	
Project	Irvine Boulevard Storm Drain Project	
Agency	City of Tustin	
Contact	Doug Stack	
Address	300 Centennial Way	
City	Tustin	
Zip	92780	
Email	awaite@tustinca.org	
Phone	(714)591-3305	
	PARTNERS	
Project Partner	**Project Partner Role**	
None		
	CATEGORY LOCATION	
Project Category	Construction	
Project Location	The proposed Irvine Boulevard Storm Drain Project is located in the northwestern portion of the City of Tustin, Orange County, Calif. The proposed storm drain improvements are specifically directed at remedying flooding problems along Irvine Boulevard within the drainage area between the El Modena-Irvine Channel to the east and Yorba Street to the west. The route of the main storm drain line between El Modena-Irvine Channel and Yorba Street is predominantly bordered by commercial land uses.	
Latitude		
Longitude		
	FUNDING	
Fund Description	**Amount**	**Percent**
Requested Funding	$2,100,000.00	50
Non-State Share (Funding Match)	$2,100,000.00	50
Local Contribution		
Federal Contribution		
In-Kind Contribution		
SRF Loan		
Total Project	$4,200,000.00	100

Funding Secure	TRUE	
Description	Construction of Phase II of the Irvine Boulevard Storm Drain Project has been included in the City of Tustin's CIP budget for FY11-12 and FY12-13.	
OM Funding Secure	TRUE	
Description	General Funds will be used to maintain the project upon completion. The City of Tustin's Field Services division currently inspects and maintains the City's storm drains on a annual basis. The additional storm drains installed by this project will be added to their existing inventory. The potential BMPs such as Filtera will be maintained by the manufacturer for one year. A contract will be established to maintain the BMP after that period.	
	GENERAL PROJECT INFO	
Name	Irvine Boulevard Storm Drain Project	
Description	It is the Lead Agency's intent to construct storm drain improvements within the drainage areas primary arterial highway to accommodate 25-year storm peak runoff volumes and accept the runoff from local areas via a series of catch basins/laterals. The proposed project is to be placed mostly within Irvine Boulevard and will comprise a new parallel storm drain and appurtenant facilities between Yorba Street to the west and the Orange County Flood Control District El Modena-Irvine Channel to the east. Approximately 17 catch basins (inlets) will be constructed along the proposed alignment.	
Goals	To upgrade flood protection infrastructure within the subject overall drainage area to a standard level of protection meeting the flood protection goals of the City of Tustin and County of Orange Public Works Department. To treat urban runoff prior to entry into the storm drain system using planter in the box type BMPs or equally effective BMP.	
Purpose	The drainage area within which the proposed project will be located comprises approximately 204± acres and has historically been subject to recurrent flooding during periods of heavy rainfall, particularly along Irvine Boulevard and its intersections with Prospect and Holt Avenues and Yorba Street. The proposed project is designed to complement and augment existing facilities and alleviate continued flooding under Q25 storm conditions.	
Institutional Barrier	No	
Institutional Barrier Desc.	There are no significant institutional or technical barriers to project.	
	SUSTAINABILITY	
LID/LEED/Ahwahnee	TRUE	
Pct LID/LEED/Ahwahnee	75	

LID/LEED/Ahwahnee Desc	The implementation of the proposed project will result in the incorporation of planter boxes for approximately 75% of the tributary area which will provide treatment and flow attenuation for initial storm flows. Currently, no treatment is provided by the existing storm drain system. Treatment of initial storm flows through bioretention type systems is consistent with LEED principles.	
Impact Nat Hydro Alluvial Fans	No Impacts	
Impact Nat Hydro Alluvial Fans Desc	The proposed project will have no impacts to the natural hydrology or alluvial fan systems. The project takes place within an existing built out urban environment.	
Climate Change Adaptation	The proposed project improves a deficient drainage system and will increase the capacity of the existing condition to allow for better drainage collection and less flooding as climate changes brings higher intensity storms in the future	
CO2 Reduction Est		
KWH/AF Est	N/A	
CO2 Reduction Desc	The proposed project which entails storm drain infrastructure improvements will incorporate approximately 10% more vegetation than under the existing condition. The incorporation of additional landscaping will provide minor benefits to greenhouse gas sequestration through the increased landscaping.	
	STRATEGIC	
Benefit Type	multiple municipalities/communities	
Benefit Accrues	Tustin/Santa Ana/Irvine/County of Orange	
Project Synergies/Linkages	The project is located in Tustin on the border of the City of Santa Ana and Unincorporated Orange County. Irvine Boulevard is a major thoroughfare going from Santa Ana into the City of Irvine and is used by all four communities. In situations when flooding occurs, traffic is slowed and some are forced to find alternative routes. Businesses and residents from all four communities would benefit from improvements made.	
Benefit Disadvantaged Communities (DAC)	FALSE	
Benefit Native Tribal Communities (NTC)	FALSE	
% Project Benefitting DAC		
% Project Benefitting NTC		
Benefit Description	None	
Environmental Justice	As a heavily used thoroughfare, Irvine Boulevard is one of the routes used by OCTA to transport commuters in Unincorporated Orange County, the City of Santa Ana, and in Tustin. The improvements made on Irvine Boulevard will allow these commuters to travel unhindered.	

	RESOURCES	
Resource Strategy	**Metric**	**Metric Unit**
Non-point source and storm water pollution reduction	1	Water treated (mgd)
Flood risk reduction	25	Flood plain protected (acres)
Technical Basis Description	The implementation of the project will result in the treatment of urban low flow runoff not currently treated. Based on local southern CA estimates for low flow runoff for developed watersheds, a recent study indicated rates of 0.2 cfs/square mile (SCCWRP, 2005). Using this result in an estimated 40,000 gallons/day of low flow treated by the proposed project which is approximately 0.04 mgd. The 25 acres number for flood risk reduction is the estimated area that will see reduced flooding with the proposed project.	
	ECONOMIC/READINESS	
Construction Jobs	85	
Operational Jobs	20	
Project Readiness/Status	Final Design (100%) completed	
CEQA Status	Not Applicable	
CEQA Date	6/30/2000	
NEPA Status	Not Applicable	
NEPA Date		
Project Complete Date	12/31/2013	
Operational Life	12/31/2063	
Construct Similar Projects	TRUE	

1316

New Model Colony Storm Drain

City of Ontario

	AGENCY INFO	
Project No	1316	
Project	New Model Colony Storm Drain	
Agency	City of Ontario	
Contact	Louis Abi-Younes	
Address	303 East B Street	
City	Ontario	
Zip	91764	
Email	labi-younes@ci.ontario.ca.us	
Phone	(909)395-2146	
	PARTNERS	
Project Partner	**Project Partner Role**	
None		
	CATEGORY LOCATION	
Project Category	Construction	
Project Location	Located in the City of Ontario, CA. The Project is located in the eastern half of the New Model Colony connecting sub watershed locations bisected by master planned north / south streets along Archibald, Turner, Haven, Mill Creek, and Milliken Avenues and limited to the north by Riverside Drive and the County Line Channel to the south.	
Latitude		
Longitude		
	FUNDING	
Fund Description	**Amount**	**Percent**
Requested Funding	$9,500,000.00	50
Non-State Share (Funding Match)		
Local Contribution	$9,500,000.00	50
Federal Contribution		
In-Kind Contribution		
SRF Loan		
Total Project	$19,000,000.00	100

Funding Secure	TRUE	
Description	The Project is funded through Development Impact Fee construction agreements and is included in the Ontario General Plan. As such, the Project is certain to be funded and constructed.	
OM Funding Secure	TRUE	
Description	Maintenance will be funded through Development Impact Fees and long term through the Operations and Maintenance Community Facilities District.	
	GENERAL PROJECT INFO	
Name	Francis Street Storm Drain	
Description	The Project is a part of a master planned solution to a regional storm water flood risk condition in an unimproved agricultural preserve in the City of Ontario New Model Colony (NMC). This annexation to the City of Ontario experiences significant flooding during frequent storm events resulting in road closures, impacts to regional circulation, loss and damage to private property, and significant challenges to provide emergency access. The Project addresses the flood risks and impacts for the eastern portion of NMC at the connections of sub-watersheds to Cucamonga Creek and the County Line Channel currently subject to high levels of flooding, significant water quality impacts from local runoff, and high erosion to the Prado Basin.	
Goals	Deterioration of adequate storm water conveyance in the Ontario New Model Colony (NMC) continues to threaten the viability public infrastructure, private property, local business, and the ability for the City to provide adequate emergency response. The goals of the Project are to (1) address storm water flood risk at major master planned regional arterials, (2) improve water quality in the Prado Basin through conveyance of storm waters to the Mill Creek Wetlands, and (3) reduce erosion and sediment to Cucamonga Creek and County Line Channel.	
Purpose	The Purpose of the Project is to address reduction in flood risk to the New Model Colony along the major north south master planned streets. The agricultural preserve (The NMC) is part of the Prado Basin containing some of the best and largest riparian habitat in Southern California. Prado Basin also serves as the principle source of recharge for the Orange County groundwater basin, the primary source of drinking water for Orange County. The NMC storm drain infrastructure is inadequate to address current flood protection needs to protect public infrastructure, private property, local business, as well as maintaining emergency access to protect local residents. Completing this Project substantially addresses flood protection while supporting efforts to enhance water quality as well as erosion and sediment impacts.	

Institutional Barrier	No	
Institutional Barrier Desc	None	
	SUSTAINABILITY	
LID/LEED/Ahwahnee	TRUE	
Pct LID/LEED/Ahwahnee	50	
LID/LEED/Ahwahnee Desc	Resource land use efficiency through the application of LID principles are outlined in the City of Ontario General Plan through land planning and application at a residential, public facility, and arterial levels. Current and future planned development will comply with the principles and requirements of the MS4 Permit.	
Impact Nat Hydro Alluvial Fans	No Impacts	
Impact Nat Hydro Alluvial Fans Desc	N/A	
Climate Change Adaptation	N/A	
CO2 Reduction Est	TBD	
KWH/AF Est	N/A	
CO2 Reduction Desc	N/A	
	STRATEGIC	
Benefit Type	serve sub-watershed	
Benefit Accrues	NMC East Watershed within the Santa Ana Watershed	
Project Synergies/Linkages	The Project is a part of a master planned solution to a regional storm water flood risk condition in an unimproved agricultural preserve in the City of Ontario New Model Colony (NMC). The Project addresses the flood risks and impacts for the eastern portion of NMC at the connections of sub-watersheds to Cucamonga Creek and the County Line Channel, which are currently subject to high levels of flooding, significant water quality impacts from local runoff, and high erosion to the Prado Basin. The Project provides regional benefits as follows: (1) addresses storm water flood risk at major master planned regional arterials, (2) improves water quality in the Prado Basin through conveyance of storm waters to the Mill Creek Wetlands, and (3) reduces erosion and sediment to Cucamonga Creek and County Line Channel.	
Benefit Disadvantaged Communities (DAC)	FALSE	
Benefit Native Tribal Communities (NTC)	FALSE	
% Project Benefitting DAC	0	
% Project Benefitting NTC	0	

Benefit Description	N/A	
Environmental Justice	N/A	
	RESOURCES	
Resource Strategy	**Metric**	**Metric Unit**
Flood risk reduction	4500	Flood plain protected (acres)
Technical Basis Description	TBA	
	ECONOMIC/READINESS	
Construction Jobs	115	
Operational Jobs	2	
Project Readiness/Status	Final design (100%) completed	
CEQA Status	Complete	
CEQA Date	1/31/2010	
NEPA Status	Not Applicable	
NEPA Date		
Project Complete Date	12/31/2015	
Operational Life	12/31/2065	
Construct Similar Projects	TRUE	

1317

Pine Avenue/Meadowhouse Creek Storm Drain Crossing

City of Chino

	AGENCY INFO	
Project No	1317	
Project	Pine Avenue/Meadowhouse Creek Storm Drain Crossing	
Agency	City of Chino	
Contact	Jim Hill	
Address	13220 Central Avenue	
City	Chino	
Zip	91710	
Email	jhill@cityofchino.org	
Phone	(909)464-8391	
	PARTNERS	
Project Partner	**Project Partner Role**	
None		
	CATEGORY LOCATION	
Project Category	Construction	
Project Location	Located in the City of Chino, CA. The Project is located on Pine Avenue at the crossing of an unnamed creek, west of Mill Creek Ave/Chino Corona Road and east of Meadowhouse Ave, partially in the Prado Basin flood inundation area.	
Latitude	33 deg 55N	
Longitude	36 deg 48W	
	FUNDING	
Fund Description	**Amount**	**Percent**
Requested Funding	$1,750,000	50
Non-State Share (Funding Match)		
Local Contribution	$1,750,000	50
Federal Contribution		
In-Kind Contribution		
SRF Loan		
Total Project	$3,500,000	100
Funding Secure	TRUE	

Description	The Project is funded through the implementation of the City's conditions of approval for new development and is included in the City's General Plan and Master Plans of Drainage. As such, the Project is certain to be funded and constructed.	
OM Funding Secure	TRUE	
Description	Maintenance will be funded through the City's conditions of approval for new development and long term as outlined in the City's General Plan.	
	GENERAL PROJECT INFO	
Name	Pine Avenue/Meadowhouse Creek Storm Drain Crossing	
Description	The Project is a part of a master planned solution to a regional storm water flood risk condition in an unimproved agricultural preserve in the City of Chino (The Preserve). Pine Avenue experiences significant flooding during frequent storm events resulting in road closures, impacts to regional circulation, loss and damage to private property, and significant challenges to provide emergency access. The Project addresses the flood risks and impacts for a portion of Pine Avenue at the crossing of an unnamed creek located near Meadowhouse Avenue currently subject to high levels of flooding, significant water quality impacts from local runoff, and high erosion to the Prado Basin.	
Goals	Deterioration of adequate storm water conveyance in the Chino Preserve continues to threaten the viability public infrastructure, private property, local businesses, and the ability for the City to provide adequate emergency response. The goals of the Project are to (1) address storm water flood risk at a critical crossing on Pine Avenue, a major regional arterial, (2) improve water quality in the Prado Basin, and (3) reduce erosion and sediment to the Prado Basin.	
Purpose	The Purpose of the Project is to address reduction in flood risk to the Chino Preserve along Pine Avenue. The agricultural preserve (The Preserve) is part of the Prado Basin, which contains some of the best and largest riparian habitat in Southern California. Prado Basin also serves as the principle source of recharge for the Orange County groundwater basin, the primary source of drinking water for Orange County. The Preserve storm drain infrastructure is inadequate to address current flood protection needs to protect public infrastructure, private property, local businesses, and to maintain emergency access to protect local residents. Completing this Project substantially addresses flood protection while supporting efforts to enhance water quality as well as erosion and sediment impacts.	
Institutional Barrier	No	
Institutional Barrier Desc	None	

	SUSTAINABILITY	
LID/LEED/Ahwahnee	TRUE	
Pct LID/LEED/Ahwahnee	50	
LID/LEED/Ahwahnee Desc	Resource land use efficiency through the application of LID principles are outlined in the City of Chino Preserve Specific Plan through land planning and application at a residential, public facility, and arterial levels. Current and future planned development will comply with the principles and requirements of the MS4 Permit.	
Impact Nat Hydro Alluvial Fans	No Impacts	
Impact Nat Hydro Alluvial Fans Desc	N/A	
Climate Change Adaptation	N/A	
CO2 Reduction Est	TBD	
KWH/AF Est	0	
CO2 Reduction Desc	N/A	
	STRATEGIC	
Benefit Type	serve sub-watershed	
Benefit Accrues	The Preserve Watershed within the Santa Ana Watershed	
Project Synergies/Linkages	The agricultural preserve (The Preserve) is part of the Prado Basin, which contains some of the best and largest riparian habitat in Southern California. Prado Basin also serves as the principle source of recharge for the Orange County groundwater basin, the primary source of drinking water for Orange County. The Preserve storm drain infrastructure is inadequate to address current flood protection needs to protect public infrastructure, private property, local businesses, and to maintain emergency access to protect local residents. Completing this Project substantially addresses flood protection while supporting regional efforts to enhance water quality as well as erosion and sediment impacts.	
Benefit Disadvantaged Communities (DAC)	FALSE	
Benefit Native Tribal Communities (NTC)	FALSE	
% Project Benefitting DAC	0	
% Project Benefitting NTC	0	
Benefit Description	N/A	
Environmental Justice	N/A	

	RESOURCES	
Resource Strategy	**Metric**	**Metric Unit**
Flood risk reduction	200	Flood plain protected (acres)
Technical Basis Description	TBA	
	ECONOMIC/READINESS	
Construction Jobs	50	
Operational Jobs	2	
Project Readiness/Status	Preliminary design (30%) completed	
CEQA Status	Complete	
CEQA Date	12/31/2003	
NEPA Status	Not Applicable	
NEPA Date		
Project Complete Date	12/31/2015	
Operational Life	12/31/2065	
Construct Similar Projects	TRUE	

1318

Ball Road Sanitary Sewer and Strom Drain Improvements from Beach Boulevard to Knott Street

City of Anaheim

	AGENCY INFO	
Project No	1318	
Project	Ball Road Sanitary Sewer and Storm Drain Improvements from Beach Boulevard to Knott Street	
Agency	City of Anaheim	
Contact	Tiberius Rosu	
Address	200 S. Anaheim Blvd	
City	Anaheim	
Zip	92805	
Email	trosu@anaheim.net	
Phone	(714)765-5176	
	PARTNERS	
Project Partner	**Project Partner Role**	
Caltrans	Coordinated Planning	
City of Stanton	Coordinated Planning	
City of Buena Park	Coordinated Planning	
	CATEGORY LOCATION	
Project Category	Construction	
Project Location	The project is located on Ball Road between Western Ave and Knott Avenue in the City of Anaheim, County of Orange.	
Latitude	33.818456	
Longitude	118.013858	
	FUNDING	
Fund Description	**Amount**	**Percent**
Requested Funding	$13,150,000	50
Non-State Share (Funding Match)		
Local Contribution	$13,150,000	50
Federal Contribution		
In-Kind Contribution		
SRF Loan		
Total Project	$26,300,000	100

Funding Secure	TRUE	
Description	Funding for the project will be from the City's sanitary sewer and storm drain construction fund.	
OM Funding Secure	TRUE	
Description	Funding for the maintenance of the project will be integral to the City's regular operational maintenance of sanitary sewer and storm drain facilities.	
	GENERAL PROJECT INFO	
Name	Ball Road Sanitary Sewer and Storm drain Improvements from Beach Boulevard to Knott Street	
Description	The project consist of the replacement of 5,650 LF of existing City storm drains ranging in sizes from 60-inch, 63-inch and 66-inch Reinforced Concrete Pipe with proposed 9x6, 9x7 and 10x7 Reinforced Concrete Boxes. It involves the replacement of 5,350 LF of undersized City sanitary sewers ranging in sizes from 15-inch to 21-inch Vitrified Clay Pipe with proposed sewers ranging in size between 21-inch to 24-inch. The work includes but is not limited to the following: construction of Reinforced Concrete Boxes, installation of VCP sewers, manholes, transition structures, open trenching operations, shoring and bracing, bedding, back fill, connection of laterals, traffic control and coordination with the City of Stanton, Buena Park and the California Department of Transportation (Caltrans).	
Goals	To maintain flood management (preventing floods to local facilities and environment).To meet the City's requirement of conveying the 10-year storm event and the flooded width criteria to prevent physical and monetary loss. To maintain vital emergency services (ambulance, fire trucks, police, etc).To prevent erosion by reducing the rate and volume of flow to the regional flood control facility. To recharge ground water through a future earthen bottom open channel system downstream promoting sustainability. To separate storm and waste water flows to the overburdened systems during storm events that potentially lead to Sanitary Sewer Overflows (SSO) once the waters are mixed. To prevent health and environmental risks associated with SSO. To maintain the regional goal set by the Santa Ana Regional Water Quality Control Board (SARWQCB) in April 2002 under Order No. R8-2002-0014 specifically related to the capacity of the publicly owned sanitary sewer collection system in northern Orange County.	
Purpose	Provide efficient capacities for both existing storm drain and sewer systems so storm water and waste water can be collected and conveyed separately. As identified in the City Master Plan of Storm Drainage for Carbon Creek Channel Tributary Areas Sep 2009, the existing SD system can only carries approximately 25% of a 10 yr storm event flow and as identified in the City Combined West Anaheim Area Master Plan of Sanitary Sewers, Mar 2005, the existing SS system can only carries approximately 51% of the existing sewer flow. Both systems are in dire needs of upsizing to keep their flows completely in each system as designed for.	

Institutional Barrier	No	
Institutional Barrier Desc	None	
	SUSTAINABILITY	
LID/LEED/Ahwahnee	TRUE	
Pct LID/LEED/Ahwahnee		
LID/LEED/Ahwahnee Desc	For the pavement portion of work, the pavement recycling method of construction will be utilized as opposed to the traditional pavement replacement method. Catch basins inserts will be used for the storm drain improvements for the removal of hydrocarbons, metals, sand, silt, trash and debris. Effects being analyzed.	
Impact Nat Hydro Alluvial Fans	No Impacts	
Impact Nat Hydro Alluvial Fans Desc	None	
Climate Change Adaptation	The storm drain facility in connection with the future earthen bottom open channel will use a natural means of filtration for recharging the quantity and quality of the water supplied to the ground water and provide some drought relief by using storm water runoff for recharging the supply of groundwater promoting sustainability by minimizing reliance on the deltas. The recharged groundwater will definitely contribute to reduction of the global warming effect.	
CO2 Reduction Est		8.89
KWH/AF Est	n/a	
CO2 Reduction Desc	The projects added capacity will minimize maintenance routes currently attributed to the undersized sanitary sewer and storm drain systems. Thereby reducing the amount of carbon dioxide emissions as a result of the maintenance operations.	
	STRATEGIC	
Benefit Accrues	Carbon Creek Channel	
Project Synergies/Linkages	The Ball Road Storm drain improvements will serve the following purposes: 1. Maintain floodwater management 2. Maintain vital emergency services during storm events 3. Mitigate SSOs and risks associated 4. Minimize effects of erosion to the County's flood control channel (Carbon Creek channel). 5. Serve as an overflow/temporary detention/sub-system to the County's flood control channel and provide additional storm water storage capacity offsetting the deficiency in the existing County system. 6. Reduce maintenance routines and reduce effects of CO2 associated with operations	
Benefit Disadvantaged Communities (DAC)	TRUE	
Benefit Native Tribal Communities (NTC)	TRUE	

% Project Benefitting DAC	n/a	
% Project Benefitting NTC	0	
Benefit Description	The level of benefits provided to disadvantaged communities will be analyzed.	
Environmental Justice	The Ball Road Storm drain improvements address Environmental Justice concerns related to physical and economical losses associated with the lack of proper/adequate flood management directly affecting approximately 821 acre drainage area a part which is considered a disadvantaged community. The added capacity will help against the physical and monetary threats directly attributed to flooding and reduce risks associated with SSOs.	
	RESOURCES	
Resource Strategy	**Metric**	**Metric Unit**
Surface storage	6	New storage capacity (AF)
Stormwater capture	900	
Flood risk reduction	821	Flood plain protected (acres)
	ECONOMIC/READINESS	
Technical Basis Description	The hydrology and hydraulic analysis are based on the Master Plan of Storm Drainage for Carbon Creek Channel Tributary Area September 2010 adopted by the City of Anaheim on October 12, 2010. The methods, data, and criteria integrated and incorporated are consistent with accepted methods of analyzing runoff throughout Orange County as outlined in the Orange County Hydrology Manual, except where superseded by the City's Storm Drainage Manual. The March 2005 West Anaheim Area Master Plan of Sanitary Sewers identified the project as being deficient. Computer modeling was performed to calculate the capacity of the system. The sewer computer modeling was completed using Hydra software and GIS data of the City. The ratio of flow depth to pipe diameter (d/D) under the existing condition was calculated using Hydra to identify sanitary sewer facilities needing improvements.	
Construction Jobs	20	
Operational Jobs	0	
Project Readiness/Status	Preliminary design (30%) completed	
CEQA Status	In Progress	
CEQA Date	4/30/2011	
NEPA Status	Not Applicable	
NEPA Date		
Project Complete Date	8/30/2012	
Operational Life	8/30/2112	
Construct Similar Projects	TRUE	

1319

Ball Road Channel from Carbon Creek Channel to Knott Street

City of Anaheim

	AGENCY INFO	
Project No	1319	
Project	Ball Road Channel from Carbon Creek Channel to Knott Street	
Agency	City of Anaheim	
Contact	Tiberius Rosu	
Address	200 S. Anaheim Blvd. #276	
City	Anaheim	
Zip	92805	
Email	trosu@anaheim.net	
Phone	(714)765-5176	
	PARTNERS	
Project Partner	**Project Partner Role**	
City of Buena Park	Coordinated Planning	
Orange County Flood Control District	Coordinated Planning	
Orange County Water District	Coordinated Planning	
Orange County Transportation Authority	Coordinated Planning	
	CATEGORY LOCATION	
Project Category	Construction	
Project Location	The project is located on the north side of the OCTA right-of-way, between Knott Ave. and Carbon Creek Channel in the City of Anaheim, County of Orange.	
Latitude	33.818736 N	
Longitude	118.0143 W	
	FUNDING	
Fund Description	**Amount**	**Percent**
Requested Funding	$2,700,000	50
Non-State Share (Funding Match)		
Local Contribution	$2,700,000	50
Federal Contribution		
In-Kind Contribution		
SRF Loan		
Total Project	$5,400,000	

Funding Secure	TRUE	
Description	Funding for the project will be from the City's storm drain construction fund.	
OM Funding Secure	TRUE	
Description	Funding for the maintenance of the project will be integral to the City's regular operational maintenance of storm drain facilities.	
	GENERAL PROJECT INFO	
Name	Ball Road Channel from Carbon Creek Channel to Knott Street.	
Description	The project consist of the replacement of 1,600 LF of existing 69-inch Reinforced Concrete Pipe City storm drain with a concrete walled, earthen bottom rectangular channel. The rectangular channel has a base width of 10 feet and a height of 8 feet. The work includes but is not limited to the following: construction of Reinforced Concrete Channel walls, installation of invert stabilizers, transition structures, open trenching operations, shoring and bracing, bedding, backfill, traffic control and coordination with the City of Buena Park, Union Pacific Railroad Company, Orange County Water District and Orange County Flood Control District.	
Goals	To maintain flood management at the local level (preventing floods to local facilities and existing/future developments). To meet the City's requirement of conveying the 10-year storm event and the flooded width criteria in order to prevent physical and monetary loss to City residents and businesses. To recharge ground water through the earthen bottom rectangular channel and thus reducing dependence on water from the drought depleted deltas. To reduce maintenance routines and reduce effects of CO2 associated with maintenance operations. To maintain the access of emergency services for essential vehicles (ambulance, fire trucks, police). To prevent erosion by reducing the high rate and volume of flows from the local system to the Carbon Creek channel a regional flood control facility.	
Purpose	As part of the Carbon Creek Channel Tributary Area drainage study performed by the City in September 2010, the existing storm drain system can only carry 25% of a 10yr storm event. It will provide an adequate conveyance system through an earthen bottom channel and will promote a reduction in the dependence on water from the drought depleted Deltas by providing ground water recharge. It will minimize the effects of erosion to the County's flood control channel (Carbon Creek channel) by reducing rate and volume of flows from the local system.	
Institutional Barrier	No	
Institutional Barrier Desc	None	
	SUSTAINABILITY	
LID/LEED/Ahwahnee	TRUE	

Pct LID/LEED/Ahwahnee	98	
LID/LEED/Ahwahnee Desc	The earthen bottom rectangular channel will eliminate the construction of traditional impermeable storm water facilities, will serve the dual purpose of storm water capture and groundwater recharge, and promote floodwater management by protecting upstream and downstream facilities and developments from flooding.	
Impact Nat Hydro Alluvial Fans	No Impacts	
Impact Nat Hydro Alluvial Fans Desc	The project is employing a combination of structural and non structural solutions for the reduction of the flood hazard.	
Climate Change Adaptation	The capacity generated by the storm drain facility will prevent future flooding, erosion and provide added capacity to the existing Carbon Creek channel during off peak periods the facility will act as an overflow. The added capacity in the storm drain will prevent the flooding of sanitary sewers and the sewer overflows during wet weather which may ultimately end up in storm drains, flood control channels and ultimately waters of the State. The earthen bottom channel will use a natural means of filtration for recharging the quantity and quality of the water supplied to the ground water and will provide some drought relief by using storm water runoff for recharging the supply of groundwater and thus minimizing reliance on the deltas.	
CO2 Reduction Est	10	
KWH/AF Est		
CO2 Reduction Desc	The projects added capacity will minimize maintenance routes currently attributed to the undersized storm drain systems. Thereby reducing the amount of carbon dioxide emissions as a result of the maintenance operations. Research on metrics of reduction under review.	
	STRATEGIC	
Benefit Accrues	Carbon Creek Channel	
Project Synergies/Linkages	The storm drain improvements will serve the following purposes: 1. Provide Floodwater Management; 2. Provide Groundwater Recharge; 3. Minimize effects of erosion to the County's flood control channel (Carbon Creek channel); 4. During off peak periods it will serve as an overflow to the County's flood control channel; 5. Reduce maintenance routines and reduce effects of CO2 associated with operations.	
Benefit Disadvantaged Communities (DAC)	TRUE	
Benefit Native Tribal Communities (NTC)	FALSE	
% Project Benefitting DAC		
% Project Benefitting NTC		
Benefit Description	The level of benefits provided to disadvantaged communities will be analyzed.	

Environmental Justice	The storm drain improvements address Environmental Justice concerns related to physical and economical losses associated with the lack of proper/adequate flood management directly affecting approximately 875 acre drainage area, a part which is considered a disadvantaged community. The added capacity will help against the physical and monetary threats directly attributed to flooding.	
	RESOURCES	
Resource Strategy	**Metric**	**Metric Unit**
Surface storage	3	
Groundwater storage/conjunctive management	3	New storage capacity (AF)
Stormwater capture	955	Flows captured (AFY)
Ecosystem/habitat restoration (wetlands creation, invasive species removal, forest management)	1	
Non-point source and stormwater pollution reduction	0	Water treated (mgd)
Groundwater recharge (new or restored)	108	Recharge capacity (AFY)
Salt/contaminant removal	22	Salt/contaminant removed (tons/yr)
Flood risk reduction	875	Flood plain protected (acres)
	0	Annual water supply (AFY)
Technical Basis Description	The hydrology and hydraulic analysis are based on the Master Plan of Storm Drainage for Carbon Creek Channel Tributary Area September 2010 adopted by the City of Anaheim on October 12, 2010. The hydrologic analysis was performed in accordance with the City of Anaheim Department of Public Works Storm Drainage Manual, dated August of 2005. The methods, data, and criteria integrated and incorporated are consistent with accepted methods of analyzing runoff throughout Orange County as outlined in the Orange County Hydrology Manual, except where superseded by the City's Storm Drainage Manual. Land use data was based on the City of Anaheim's General Plan and soils information was based on the 1986 Orange County Hydrology Manual. Land use, soil information and subarea information was input into the Advanced Engineering Software Computer Program RATOC which is based on the 1986 Orange County Hydrology Manual. The proposed storm drains were analyzed using Manning's Equation for uniform steady sta	

	ECONOMIC/READINESS	
Construction Jobs	10	
Operational Jobs	0	
Project Readiness/Status	Preliminary design (30%) completed	
CEQA Status	In Progress	
CEQA Date	4/15/2011	
NEPA Status	In Progress	
NEPA Date	8/31/2011	
Project Complete Date	8/1/2012	
Operational Life	8/1/2112	

1320

Frances Street Storm Drain

City of Ontario

	AGENCY INFO	
Project No	1320	
Project	Frances Street Storm Drain	
Agency	City of Ontario	
Contact	Louis Abi-Younes	
Address	303 East "B" Street	
City	Ontario	
Zip	91764	
Email	labiyoun@ci.ontario.ca.us	
Phone	(909)395-2146	
	PARTNERS	
Project Partner	**Project Partner Role**	
None		
	CATEGORY LOCATION	
Project Category	Construction	
Project Location	Located in Ontario, CA. The Project is located on Francis St, centered on the intersection of Grove Ave with limits to Bon View St to the west and the West Cucamonga Creek to the east.	
Latitude		
Longitude		
	FUNDING	
Fund Description	**Amount**	**Percent**
Requested Funding	$5,000,000	50
Non-State Share (Funding Match)		
Local Contribution	$5,000,000	50
Federal Contribution		
In-Kind Contribution		
SRF Loan		
Total Project	$10,000,000	100
Funding Secure	TRUE	

Description	The Project is funded through Development Impact Fees and is included in the Ontario General Plan. The Project funding is secured.
OM Funding Secure	TRUE
Description	Maintenance will be funded through the General Fund.
	GENERAL PROJECT INFO
Name	Francis Street Storm Drain
Description	The Project is a part of a master planned solution to a regional storm water flood risk condition in the core of the City of Ontario business and residential districts. This urbanized area on Francis Street, bounded to the west by Bon View Ave and the West Cucamonga Creek to the east, experiences significant flooding during frequent storm events resulting in road closures, impacts to regional circulation, loss and damage to private property, schools, and significant challenges to provide emergency access. The Project addresses the flood risks and impacts for several major intersections and associated public and private property within the City connecting storm drainage flows to the West Cucamonga Creek Channel and the Ely Groundwater Recharge Basins. The severity of these impacts requires closures and re-routing of circulation, including emergency response at very low probability storm events.
Goals	Deterioration of adequate storm water conveyance in the Ontario existing urbanized areas continues to threaten the viability public infrastructure, private property, local business, and the ability for the City to provide adequate emergency response. The goals of the Project are to (1) address storm water flood risk at major regional arterials, (2) improve water quality in the Chino Groundwater Basin through conveyance of storm waters to the Ely Basins, and (3) enhance local water supply through infiltration and groundwater recharge at the Ely Basins.
Purpose	The Purpose of the Project is to address reduction in flood risk to Ontario's urban core on Francis St and major crossing intersections such as Grove Ave. The West Cucamonga Creek Channel is an integral part of the Chino Basin groundwater supply and also serves as the principle source of recharge locally and regionally, the primary source of drinking water for cities within the Chino Basin. The Francis St storm drain infrastructure is inadequate to address current flood protection needs to protect public infrastructure, private property, local business, as well as maintaining emergency access to protect local residents. Completing this Project substantially addresses flood protection while supporting efforts to enhance water quality as well as groundwater supply for Chino Basin.
Institutional Barrier	No

Institutional Barrier Desc	None	
	SUSTAINABILITY	
LID/LEED/Ahwahnee	TRUE	
Pct LID/LEED/Ahwahnee	100	
LID/LEED/Ahwahnee Desc	Resource land use efficiency through the application of LID principles are outlined in the City of Ontario General Plan through land planning and application at a residential, public facility, and arterial levels. Current and future planned development will comply with the principles and requirements of the MS4 Permit.	
Impact Nat Hydro Alluvial Fans	No Impacts	
Impact Nat Hydro Alluvial Fans Desc	N/A	
Climate Change Adaptation	TBD	
CO2 Reduction Est	TBD	
KWH/AF Est	N/A	
CO2 Reduction Desc	TBD	
	STRATEGIC	
Benefit Type	Entire Watershed	
Benefit Accrues	Santa Ana Watershed	
Project Synergies/Linkages	The Project is a part of a master planned solution to a regional storm water flood risk condition in an urbanized area in the City of Ontario. The Project addresses the flood risks and impacts for regional and local streets and arterials for a 700 acre sub-watershed to West Cucamonga Creek, which are currently subject to high levels of flooding and significant water quality impacts from local runoff. The Project provides regional benefits as follows: (1) addresses storm water flood risk at major master planned regional arterials, (2) improves water quality in the Chino groundwater Basin through conveyance of storm waters to the Ely Basins, and (3) enhances the local drinking water supply.	
Benefit Disadvantaged Communities (DAC)	FALSE	
Benefit Native Tribal Communities (NTC)	FALSE	
% Project Benefitting DAC		
% Project Benefitting NTC		
Benefit Description	N/A	
Environmental Justice	N/A	

	RESOURCES	
Resource Strategy	**Metric**	**Metric Unit**
Groundwater recharge (new or restored)	60	Recharge capacity (AFY)
Flood risk reduction	50	Flood plain protected (acres)
Technical Basis Description	TBD	
	ECONOMIC/READINESS	
Construction Jobs	100	
Operational Jobs	2	
Project Readiness/Status	Final design (100%) completed	
CEQA Status	Complete	
CEQA Date	1/31/2010	
NEPA Status	Not Applicable	
NEPA Date		
Project Complete Date	12/31/2015	
Operational Life	12/31/2065	
Construct Similar Projects	TRUE	

MEETING MINUTES

OWOW STEERING COMMITTEE **January 20, 2011**

PARTICIPANTS PRESENT

Ron Sullivan, Convener	SAWPA
Garry Brown	Orange County Coastkeeper
Beth Krom	City of Irvine
Marion Ashley	County of Riverside
Ron Loveridge	City of Riverside
Josie Gonzales	County of San Bernardino
Pat Morris	City of San Bernardino
George Aguilar	San Bernardino Valley Water District

OTHERS PRESENT

Caryn Puma	City of Irvine, Council Member Beth Krom's Office
Mark Tettemer	Irvine Ranch Water District
Stuart McKibbin	Riverside County Flood Control District
John Richardson	County of San Bernardino
Celeste Cantú	SAWPA
Mark Norton	SAWPA
Jeff Beehler	SAWPA
Dawna Munson	SAWPA

The Steering Committee Meeting was called to order at 3:08 p.m. by Convener Ron Sullivan at SAWPA, 11615 Sterling Avenue, Riverside, CA 92503. There were no public comments received.

Governance Document Revisions

Celeste Cantú said that part of what was adopted in the OWOW Governance Document was the method by which the Steering Committee members would be appointed in the future. Upon discussion at the November 2010 meeting, it was the consensus of the Committee that it is not appropriate to have the League of Cities recommend members representing the cities, but rather the Councils of Government for each of the three entities should decide, i.e. WRCOG for Riverside County, SANBAG for San Bernardino County, and OCCOG for Orange County. The revised Governance Document now reflects those changes.

Upon motion by Pat Morris, seconded by Marion Ashley, the motion unanimously carried:

SC/11-01-01
MOVED, approval of the Amended OWOW Governance Document with regard to Steering Committee membership.

Members representing the cities will be recommended by:

- Western Riverside Council of Governments (WRCOG) for Riverside County.
- San Bernardino Association of Governments (SANBAG) for San Bernardino County.
- Orange County Council of Governments (OCCOG) for Orange County.

OWOW Steering Committee – Discussion Regarding Open Seats

Celeste Cantú said that there are several Steering Committee seats opening up, as most of the Committee Members appointments expire in March 2011; she hopes that they will seek reappointments. Convener Sullivan added that it is hoped that everyone stays on the Committee; it would be good to keep the basic team together, particularly after all the efforts going through the first round of funds.

Ron Loveridge entered the meeting room at 3:18 p.m.

Recent Presentations on OWOW

Celeste Cantú informed the Committee that she and Larry McKenney currently are providing updated OWOW presentations to various entities as requested.

Proposition 1E – Stormwater Projects

Celeste Cantú said that it often has been noted that OWOW is not about Proposition 84 exclusively, and Proposition IE clearly illustrates that. The State is requiring that the funds dispersed under Proposition 1E also go through a process such as OWOW. Jeff Beehler then provided a brief PowerPoint presentation on the Proposition 1E process and guidelines for stormwater projects. He reviewed the multiple benefits, the OWOW projects eligible to compete, and informed the Committee of the workshop SAWPA will hold February 3, 2011 at 1:30 p.m. to discuss the application process. He reviewed that Proposition 1E is a competitive process amongst all that apply for it throughout the State; the applications are due by April 15, 2011.

The last order of business for this item is to ask the Committee to amend the OWOW List for Proposition 1E eligible projects. Staff seeks authorization to reopen the process in the event that there are entities that have a solid project, but hadn't anticipated the requirements to be part of the OWOW Plan. Amending the list enables us to bring them into the fold. The list would be brought back before the Committee for review and approval.

Upon motion by Marion Ashley, seconded by Pat Morris, the motion unanimously carried:

SC/11-01-02
MOVED, approval to amend the OWOW List for Proposition 1E Eligible Projects, and to bring back the list before the Committee for review and approval.

Proposition 84 Updates

A. Proposition 84 as Part of OWOW: The 13 projects were submitted on time and staff has done a "lessons learned" meeting on how the process can be streamlined for us, as well as the applicants. Staff also is working with the Bureau of Reclamation (BOR) in developing a scope for planning activities focused on action rather than description. The BOR hopes to hold a "big check" ceremony.

B. DWR and OWOW Schedule Update: The next step will be to ask the Pillar Committee to provide a "post mortem" on the project selections.

C. Bond Sales Projections: Celeste Cantú just heard from the State that this may be done as late as next fiscal year. Some of the process will go on, but the signing of contracts may be delayed.

Approval of Minutes from the Meeting of 11-18-10

Upon motion by Pat Morris, seconded by Beth Krom, and George Aguilar abstaining, the motion unanimously carried:

SC/11-01-03
MOVED, approval of the Minutes from the meeting held 11-18-2010.

Announcements/Adjournment

Celeste Cantú reported that:

- The next meeting will be held March 17, 2011 at the Green River Golf Course in Corona.
- The OWOW Conference is moving forward and will be held at the Riverside Convention Center.

Celeste Cantú presented Beth Krom with a beautifully framed poem that Ms. Krom had written about OWOW in its formative years. The Committee thanked her for her inspiration.

George Aguilar commented that he has worked with many of the Committee members in the past, and he looks forward to working with everyone and helping to make the Committee the best it can be.

There being no further business, Convener Sullivan adjourned the meeting at 3:52 p.m.

APPROVED:
March 17, 2011

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Ron Sullivan, Convener

1-20-11 Min